

**CLAIMS**

1. A bed foundation, comprising:
  - 2 a rectangular top panel having opposite sides, opposite ends, and  
four corners;
  - 4 a pair of side panels and a pair of end panels depending  
downwardly from opposite sides and ends of the top panel, respectively,  
6 to form a box-like enclosure having an open lower end;  
a corner support at each corner of the enclosure, each corner  
8 support having a lower face and a bore extending upwardly from the  
lower face of the corner support for receiving the end of a support leg for  
10 supporting the enclosure at a position raised above a floor surface; and  
the panels and corner supports being of expanded rigid plastic foam  
12 material.
2. The foundation as claimed in claim 1, wherein the top panel, side  
2 panels, end panels and corner supports are formed integrally in one piece.
3. The foundation as claimed in claim 1, wherein the top panel, side  
2 panels, end panels and corner supports are formed separately.
4. The foundation as claimed in claim 3, including securing devices for  
2 securing the top, side and end panels and corner supports together to  
form said box-like enclosure.
5. The foundation as claimed in claim 1, wherein at least one cross brace  
2 extends between the side panels.

- 2 6. The foundation as claimed in claim 5, including a leg mounting block  
secured to said cross brace, the leg mounting block having a downwardly  
facing mounting bore for mounting an additional support leg.
- 2 7. The foundation as claimed in claim 1, wherein the side panels each  
have at least one opening.
- 2 8. The foundation as claimed in claim 7, wherein the openings are  
rectangular.
- 2 9. The foundation as claimed in claim 7, wherein the openings are  
circular.
- 2 10. The foundation as claimed in claim 7, wherein the openings extend  
over at least 50% of the total surface area of the respective panel.
- 2 11. The foundation as claimed in claim 1, wherein one end panel has  
horizontal slots for mounting of a head board.
- 2 12. The foundation as claimed in claim 1, wherein the expanded rigid  
plastic foam material is selected from the group consisting of phenolic,  
urethane, and poly-isocyanate rigid foam.
- 2 13. The foundation as claimed in claim 12, wherein the foam is of the  
closed cell variety.
- 2 14. The foundation as claimed in claim 12, wherein the foam has a  
density in the range from 5 to 20 pounds per cubic foot.

15. The foundation as claimed in claim 1, wherein the top panel has a  
2 lower layer of the same foam material as the side and end walls, and an  
upper layer, the upper layer comprising a flexible foam layer.

16. A bed foundation, comprising:  
2 a rectangular panel of expanded rigid plastic foam material, the  
panel having an upper face, opposite sides, opposite ends, and four  
4 corners;  
each corner having a lower face and a bore extending upwardly  
6 from the lower face; and  
a support leg mounted in the bore at each corner of the panel for  
8 supporting the panel at a spacing above a floor surface.

17. The foundation as claimed in claim 16, further comprising a plurality  
2 of springs secured to the upper surface of the panel, and a cover  
enclosing the springs.

18. The foundation as claimed in claim 16, wherein the panel is of  
2 uniform thickness and has flat upper and lower faces.

19. The foundation as claimed in claim 16, wherein the panel has a lower  
2 face having a plurality of recesses.

20. The foundation as claimed in claim 19, wherein the recesses are  
2 rectangular recesses extending parallel to the ends of the panel.

21. The foundation as claimed in claim 16, further comprising a pair of  
2 side panels and a pair of end panels depending downwardly from opposite

4 sides and ends of the rectangular panel, respectively, to form a box-like enclosure having an open lower end.

2 22. The foundation as claimed in claim 16, wherein the expanded rigid plastic foam material is selected from the group consisting of phenolic, urethane, and poly-isocyanate rigid foam.

2 23. The foundation as claimed in claim 22, wherein the foam is of the closed cell variety.